

System 100

Fig. 1

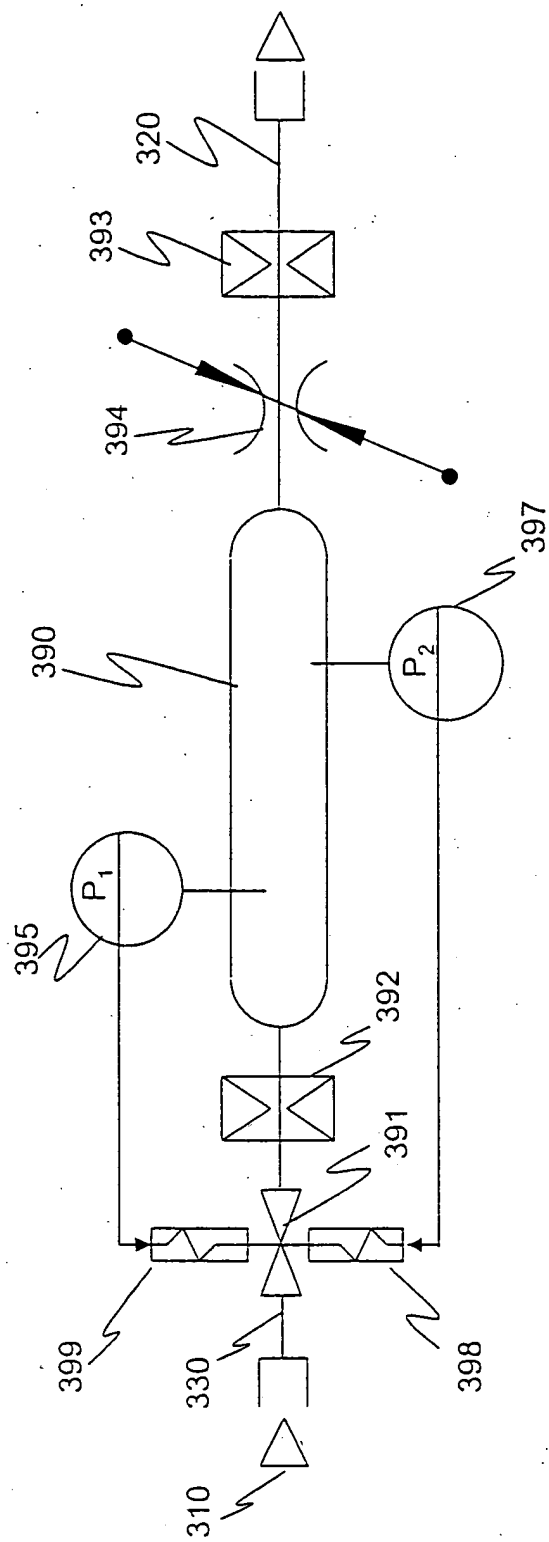


FIG. 2

# Hydrogen Pressure and Mass Flow with Maximum External Load

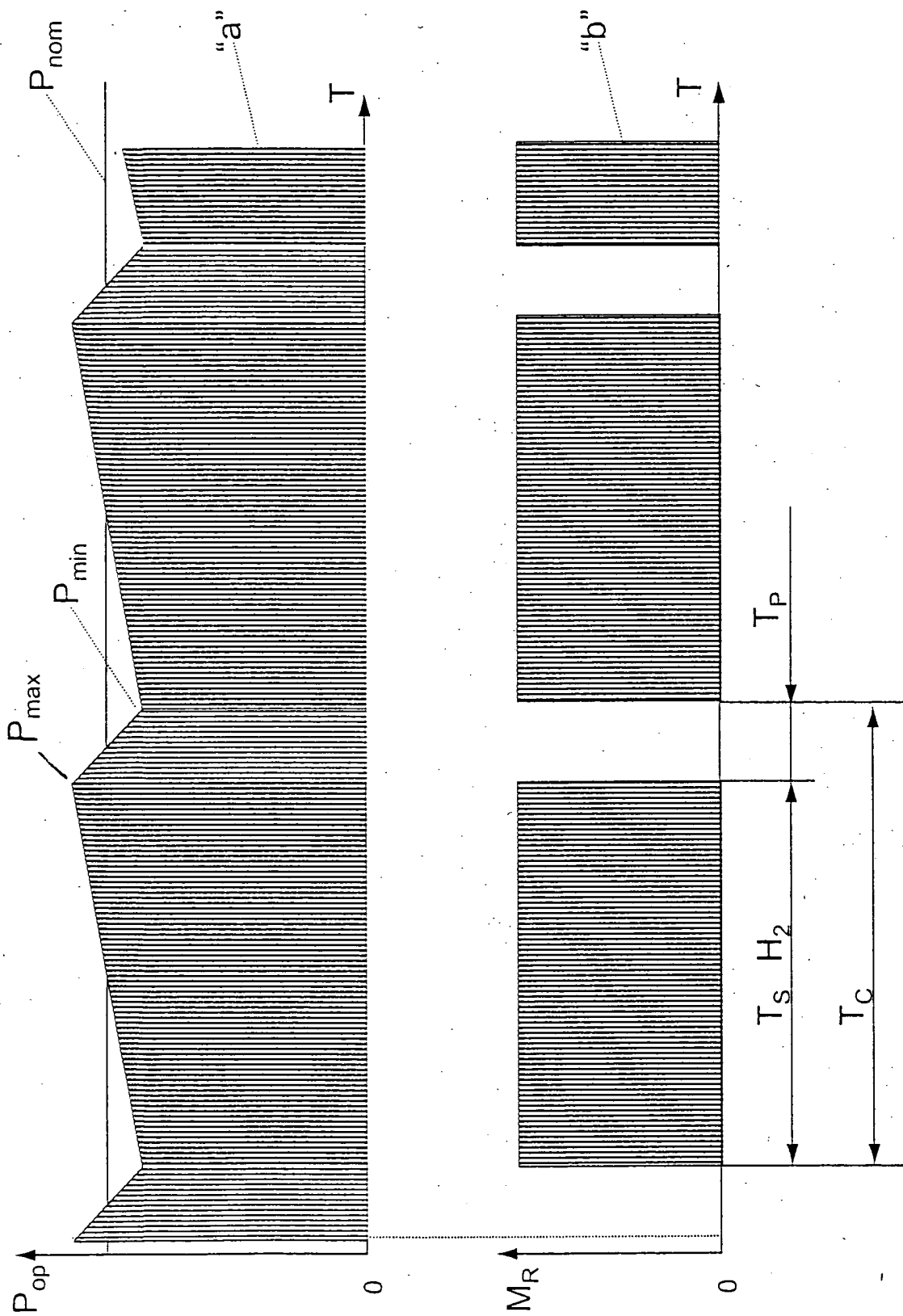


FIG. 3a

Hydrogen Pressure and Mass Flow with Intermediate External Load

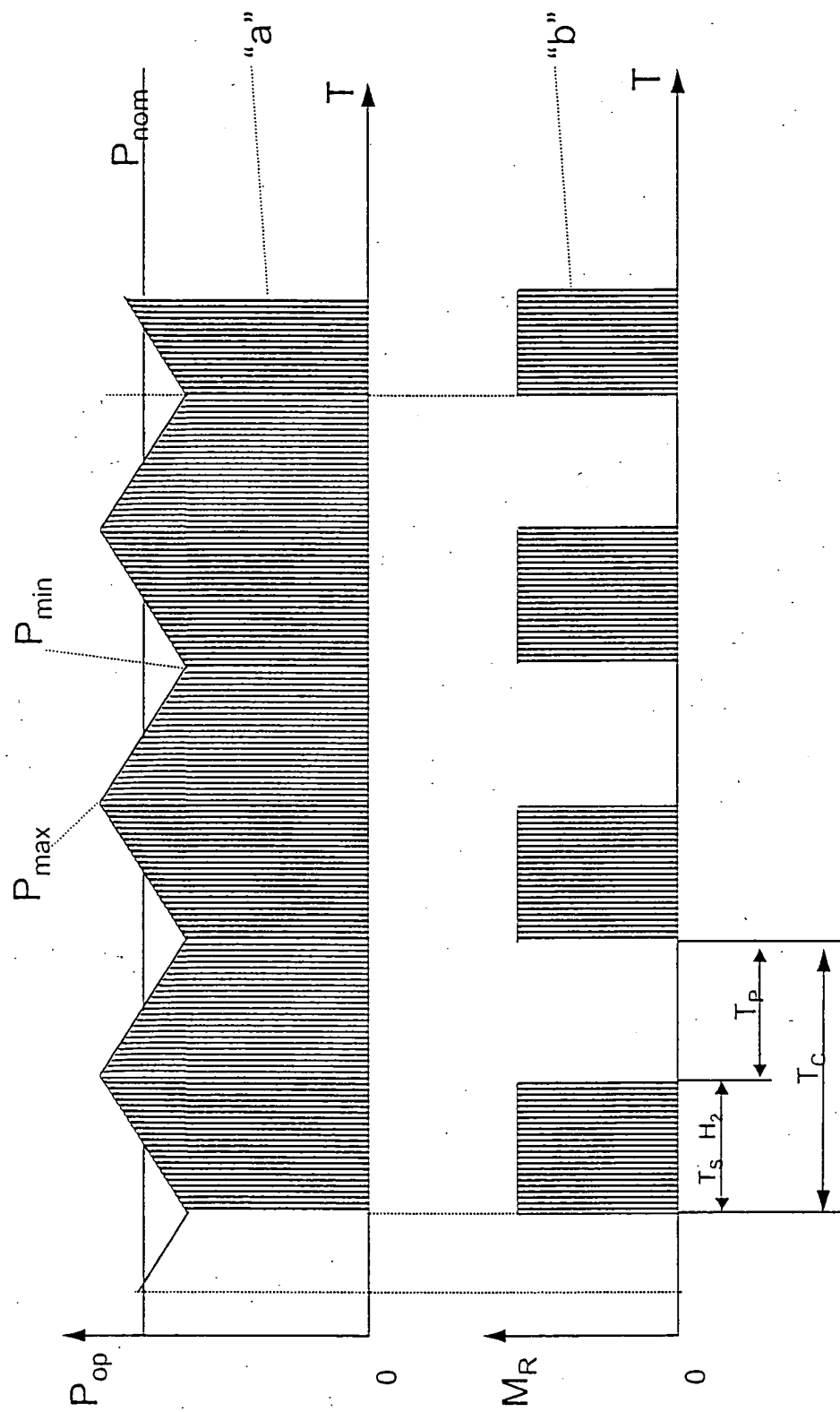
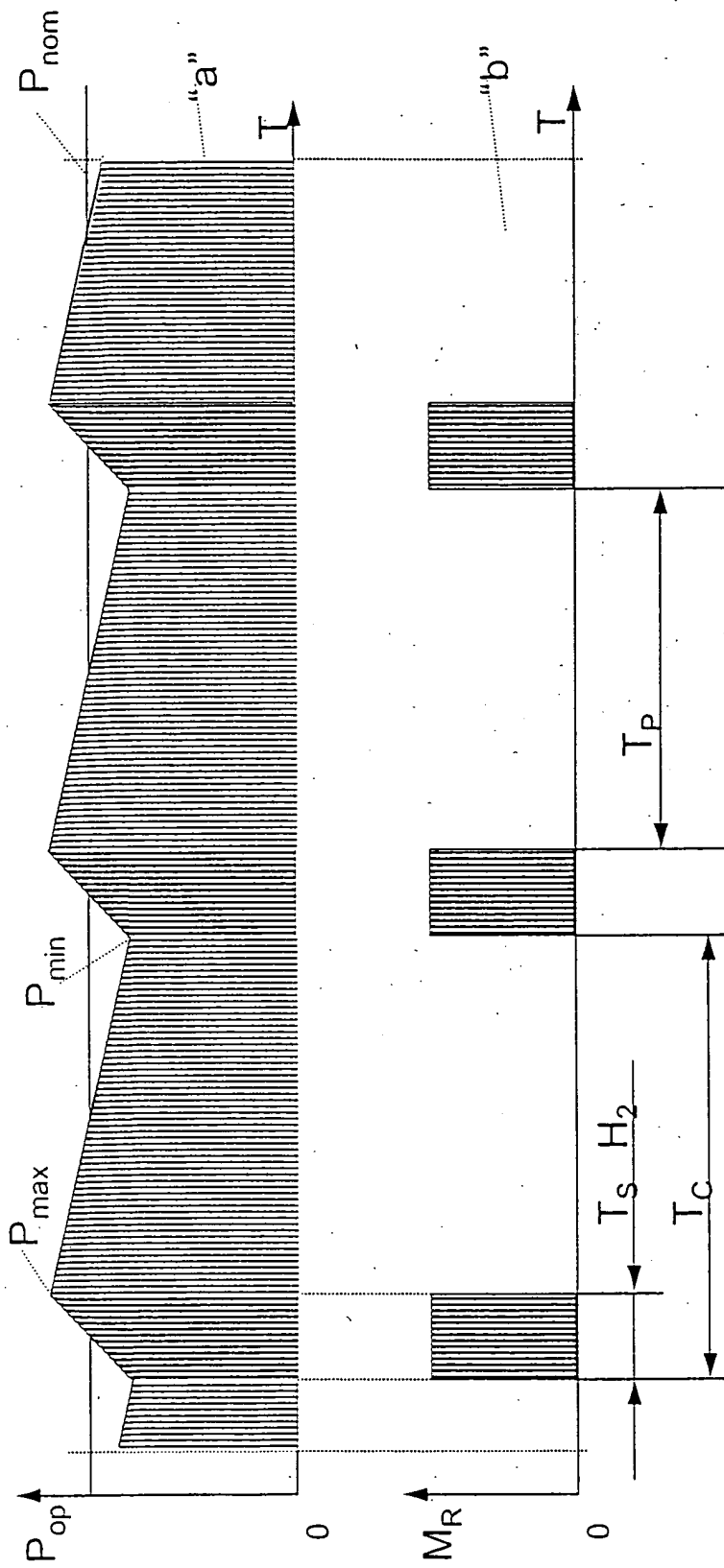


FIG. 3b

# Hydrogen Pressure and Mass Flow with Minimal External Load



"a" - Change of the operating pressure in the anode chambers of the fuel cell stack

"b" - Mass gas flow in the gas re-circulation loop

$P_{op}$  - Operating Pressure

$P_{max}$  - Maximum operating pressure

$P_{min}$  - Minimum operating pressure

$P_{nom}$  - Nominal operating pressure

$T$  - Time

$M_R$  - Mass re-circulation flow

$T_s H_2$  - H<sub>2</sub> supply time

$T_c$  - Cycle time

$T_p$  - Pause time

FIG. 3c